

BOWEN UNIVERSITY, IWO, OSUN STATE
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
INDUSTRIAL CHEMISTRY PROGRAMME
2022/2023 B.SC DEGREE SECOND SEMESTER EXAMINATION

Course Code: CHM 204

Courses Title: General Chemistry Practical II

Date: 22/06/2023

Credit: 1

Time Allowed: 1 hour

INSTRUCTIONS

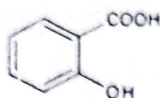
- (a) Answer all questions on the questions paper
(b) Write legibly your details on the space provided

NAME:

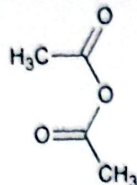
MATRIC NO:

PROGRAMME:

1. Crystallization technique is used to obtain _____ solids (1 Mark)
2. A suitable solvent for recrystallization is one that readily _____ the solute when hot but not when it is _____. (2 Marks)
3. Crystallization is the process by which a solid forms, where the atoms or molecules are highly organized into a structure known as a _____. (1 Mark)
4. Over a range of temperature, the best solvent for recrystallization exhibits a very big _____ in solubility. (1 Mark)
5. In crystallization, slow cooling gives _____ and rapid cooling gives _____. (2 Marks)
6. Acetylsalicylic acid is also commercially referred to as _____. (1 Mark)
7. _____ is the byproduct obtained in the laboratory synthesis of acetylsalicylic acid (1 Mark)
8. Solvent pair must be _____ to be considered suitable for crystallization (1 Mark)
9. _____ and _____ are the major chemicals used to synthesize aspirin in the laboratory. (2 Marks)
10. KMnO_4 and _____ can be used to test for unsaturation in the laboratory (1 Mark)
11. The structure below is called _____ (2 Marks)



12. The structure below is called _____ (2 marks)



13. Polar solvents dissolve _____ while non-polar solvents dissolve _____ (2 Marks)

14. The solubility of a soap depends on _____ of the carbon (1 Mark)

15. Two examples of laboratory glass wares are _____ and _____ (2 Marks)

16. What is Saponification? _____ (2 Marks)

17. Coconut oil contains mainly _____ and _____ acids (2 Marks)

18. Lard differs from tallow, in that lard contains more _____ (1 Mark)

19. Coconut oil is usually added to produce soap, because it makes soap _____ and _____ (2 Marks)

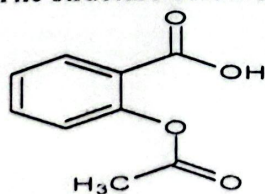
20. Olive oil contains mainly _____ acid (1 Mark)

21. Toilet soaps are usually made from _____ oil (1 Mark)

22. KMnO_4 has a _____ colour (1 Mark)

23. The catalyst used in the synthesis of aspirin is called _____ (1 Mark)

24. The structure below is called _____ (2 Marks)



25. _____ hydrocarbons can add more hydrogens to themselves (1 Mark)

26. Water can be a recrystallization solvent between _____ and _____ °C (2 Marks)

27. Prop-2-yne is _____, while 2,3-dichloropentane is _____ (2 Marks)